Unit: Organic Chemistry	
IB Expectations/ Assessment Criteria	
Approach	**Significant concept(s) / Considerations**
interactive	Which general group a particular compound belongs and what is the chemical property of the group?
Guiding Questions	**Learner Profile**
Organic chemicals behave similarly inside its homologous series. So it's important to understand which particular homologous series a compound falls under and how does it react to a particular group of reagents to form product?	▪ Inquirers ▪ Knowledgeable ▪ Thinkers ▪ Communicators ▪ Reflective
Central Idea / Content	**Learning Objectives**
10.1 Introduction 10.2 Alkanes 10.3 Alkenes 10.4 Alcohols 10.5 Halogenoalkanes 10.6 Reaction pathways 20.1 Introduction 1 20.2 Nucleophilic substitution reactions 20.3 Elimination reactions 20.4 Condensation reactions 20.5 Reaction pathways 20.6 Stereoisomerism	This is an introductory course to organic chemistry. Students are expected to understand the whole range of organic chemicals is grouped into several categories called homologous series and all the members of the group behave similarly chemically. So it's more general reaction trends which apply to the group. In this course student will learn how the organic chemicals are named depending on the branching of carbon chain.

Assessment		
Other Written Assessment Electrochemical cells 1 & 2 **Examination** Test **Other Written Assessment** Assignment **Other Written Assessment** DCP **Other Written Assessment** Chemical properties of hydrocarbons DCP **Examination** Test **Other Written Assessment** Reactions of aldehydes, ketones DCP **Other Written Assessment** Nucleophilic substitution reactions of halogenoalkanes DCP **Examination** Assignment and Test		
Information Literacy & ICT	**International Mindedness**	**TOK**
Power point slide for anchoring thru the subtopics and concepts are used for better and clear understanding.	Why the IUPAC naming for organic compounds were introduced though most of the compounds are known for centuries.	1. The use of the different formulas illustrates the value of different models with different depths of detail. This could be discussed as an example of the

Flash animations are used for clear understanding of some reactions. During this course, student will do several virtual experiments and simulations to understand the electrophilic and nuclophilic reactions and substitution or elimination or addition subtype.		2. Use of the language of chemistry as a tool to classify and distinguish between different structures. The existence of optical isomers provided indirect evidence of a tetrahedrally bonded carbon atom. This is an example of the power of reasoning in allowing us access to the molecular scale. Do we know or believe those carbon atoms are tetrahedrally coordinated? The use of conventions in representing three- dimensional molecules in two dimensions could also be discussed.

Strategies / Activities / Differentiation	**Resources**
Students will be introduced with the initial concepts of the particular subtopic and they face an online test which poses some of the problems on the particular concept under consideration. Thereafter the more complicated concepts will be introduced in the next half of the class. and molecular modelling tools are used to illustate the 3D concepts. Students were asked to read thru a particular part of text before next class.	1. IB chemistry-Geoff Neuss 2. Chemistry text book-Catrin Brown 3. PowerPoint presentations as teaching aid (on core and advanced concepts) 4. Web resources (teacher tube etc) 5. Worksheet on a. Nomenclature b. Isomerism c. Reactions of alkanes d. Reactions of haloalkane e. Reactions of alkene Reactions of alcohols Molecular modelling tools

Unit Reflections